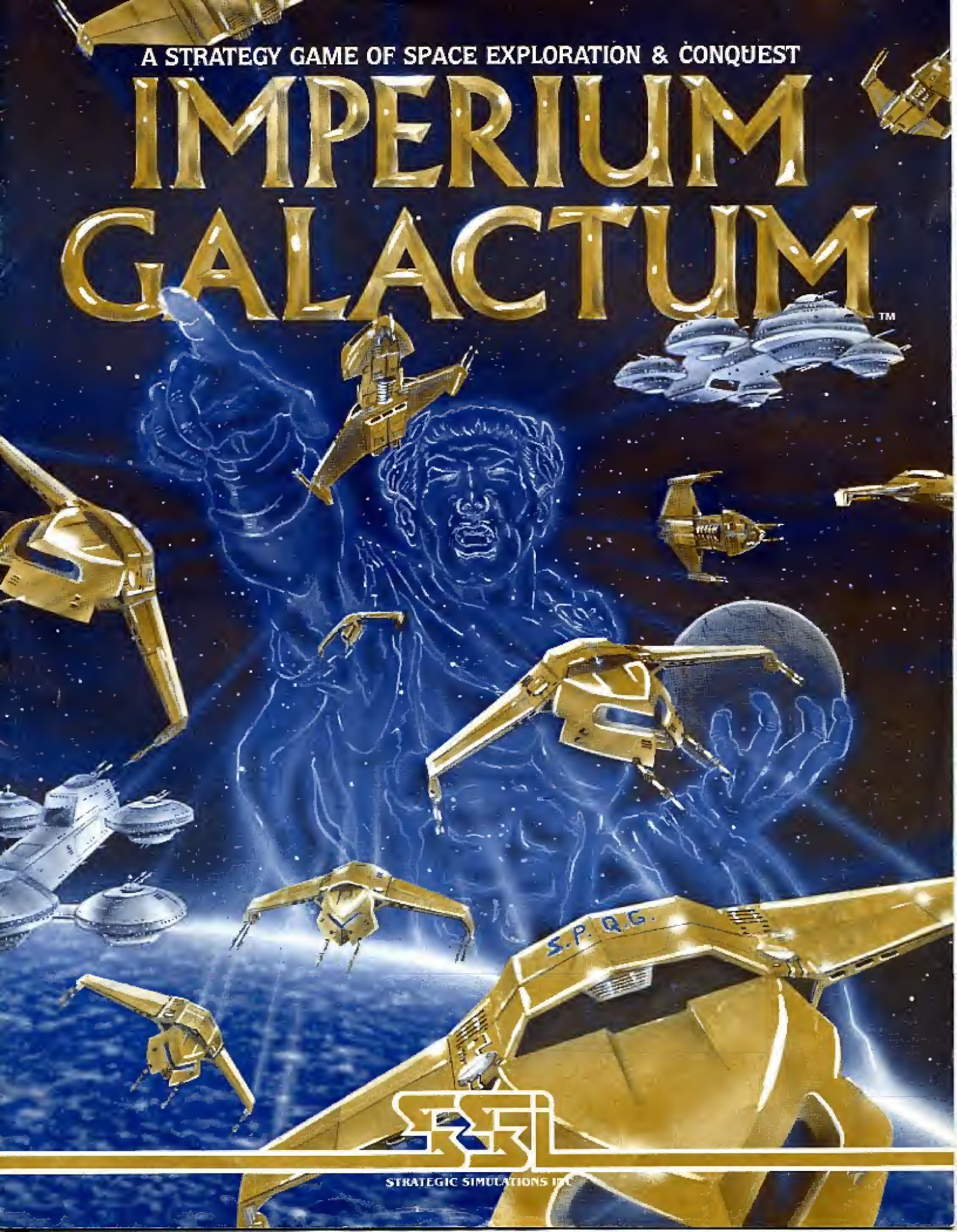
A STRATEGY GAME OF SPACE EXPLORATION & CONQUEST

IMPERIUM GALACTUM™



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1.0 INTRODUCTION

IMPERIUM GALACTUM™ is an operational level space game of exploration and conquest in a star cluster. You control your empire's economy, the design and construction of warships, and negotiations with other races, both player and non-player. The winner is the player who has accumulated the greatest total population when you decide to quit.

Each game turn is five years in length. A game turn consists of 1) Commerce and Commerce Raiding, 2) Depreciation and Production, 3) Negotiation, 4) Two rounds of Movement and Combat.

1.1 TALKING TO THE COMPUTER

To enter a response to the computer that could only consist of one character (such as a menu command or yes/no question), type the character without pressing RETURN. To enter a response that could consist of more than one character (such as a task force number or number of items to be produced), type the entry and a carriage return <CR>.

1.2 SAVING THE GAME

At the end of each combat phase, the computer provides you with the opportunity of saving the game. The disk must be initialized for SSI use during the game by following instructions included in the game program (Atari owners may use any Atari formatted disk). Once a game has been saved, you can resume it at the point you left off.

Note also that to end the game, you go to the save game routine. By typing 'E' you end the game, the computer adds up the victory points and returns you to the game with all players set to human so you can see them.

1.3 THE MAP

The map is a 20 × 40 square grid containing fifty star systems of various types. The map shows any friendly task forces at a star system and any enemy task forces in star systems containing friendly task forces or planets. There is also a tactical map which shows an area of twenty by ten stars. This more clearly shows at which systems there are task forces. (See 4.0 USING THE MAP for details.)

1.4 STARTING THE GAME (APPLE)

Boot the Scenario side of your disk; the game will begin automatically. After selecting the starting parameters for your game, you are told to insert the Game side of your disk. If you are using an Apple II with Pascal, you must first use your BASICS disk. If you are using an Apple III, you must first go into Apple II emulation mode.

1.5 STARTING THE GAME (ATARI)

Remove all cartridges, then insert the Scenario side of your disk into Drive #1 and turn on your computer. If you own an Atari 800XL, hold down the OPTION key while booting. After initializing the game values you will be told to insert the Game side of your disk.

1.6 STARTING THE GAME (C-64)

To begin the game, insert the game disk and type Load "*",8 and press <RETURN>. When READY appears, type RUN and press carriage return <CR>.

2.0 GENERAL DESCRIPTION

2.1 PARTS INVENTORY

A. Game box
B. Rule book
C. 5¼" game disk

2.2 DEFINITION OF GAME TERMS

Population Point (POP): The amount of people on the world. Each point does not represent any given number of people; it just represents the size of the population. A player wins by having the largest population at the end of the game.

Industrial Output Point (IO): This is the basic unit of commerce. Each possible product which you can invest in costs a certain number of IOs.

Military Industrial Output Point (Mil IO): This is a unit of commerce which need only be spent when buying a ship, an army or a defense base. Each time you buy one of these items you must spend a number of Mil IOs.

IO Pool: This is the total number of IOs which you have accumulated so far in the game. Each time you buy an item it subtracts the cost of the item from the IO Pool. IOs can be spent on any owned or allied planet and may accumulate from turn to turn.

Military IO Pool: This is the total number of Mil IOs that may be spent at a planet during a given turn. Each time a product is bought which requires Mil IOs, the cost is subtracted from the IO Pool and from the planet's Mil IO Pool. Each planet has a Mil IO Pool determined by that planet's industry. Mil IO Pools are zeroed at the end of each Production Phase.

Agriculture (AG): This represents the amount of land under cultivation. Each AG point provides food for four population points and requires one half of a population point to work it.

Mine: This represents the amount of land being mined for ore, fuel and other minerals. Each mine supplies one industry with enough ore to operate and requires one half of a population point to be worked.

Industry (IND): Industry is what is used to manufacture the IOs and Military IOs needed to construct new ships, develop planets, and increase your technological level. Each industry produces three IOs and two Military IOs and requires one and one half population points to operate.

Active Industry: This is the number of industry that can actually produce IOs . . . the industry with enough workers and ore to operate.

Environment (ENVT): This is how well a planet supports life. The maximum amount of AG that a planet may have is equal to its environment minus 50.

Resource (RSRC): This represents the amount of minerals available on a planet and controls the speed at which mines on the planet depreciate. The number of mines on a planet may never exceed the planet's resource.

Star Type: This is the spectral class of the star. There are five star types, each with a different chance of having planets and influencing the characteristics of the planets they do have:

B: These have a high chance of having planets. Their planets will tend to be extremely low environment and extremely high resources. They are blue in color.

F: These have a moderate to low chance of having planets. Their planets will tend to be high resource and average barely livable environments though this varies considerably. They are green in color.

G: This is the spectral class of our sun. They have a fair chance of having planets and the planets tend to have good environment and resource. They are yellow in color (white on the Apple).

K: These are the most common stars and usually will have at least one planet. Their planets tend to have high environments but poor resources. They are red in color.

M: These stars are the armpit of the cluster. Not only do they seldom have planets, but the planets they do have are almost always unusable. But they MIGHT have a decent planet. On the Atari, these planets are shown as banded; on the Apple they are violet.

Warships: These are ships which are capable of ship-to-ship and ship-to-planet combat. Each warship is one of eight player-defined classes and has an efficiency and technological level.

Efficiency (EFF): This represents the relative readiness of a ship for combat. As a ship suffers damage, its EFF drops. When a ship's EFF reaches zero, it is destroyed. All ships which are not on repair lose four from their EFF each turn. Ships on repair have their EFF restored to 100. The loss of EFF reduces the ship's ability to attack and defend in combat. Only warships have EFF.

Ship Class: There are eight user definable ship classes in the game. Each ship class is rated for the following characteristics:

Planetary Bombardment (PB): Almost useless in ship-to-ship combat, planetary bombardment is extremely useful against SDFs and PDFs.

Energy Weapons (EN): With a high rating, energy weapons can do a great deal of damage if they hit.

Missile Systems (MS): Missile Systems do the same amount of damage no matter what the MS; a high MS merely increases the chance of a hit.

Evasion (EV): A ship's evasion is its ability to dodge energy weapons. The higher the EV, the greater the chance of the enemy missing with EN or PB.

Armor (AR): Armor is used to reduce the damage done by EN hits.

Anti-Missile (AM): AM reduces the chance of a missile scoring a hit on your ship.

Speed (SP): Speed controls how far the ship may move during the Movement Phase. A task force may only move as fast as its slowest ship. A ship's speed is equal to its tech level added to the speed of the ship's class.

Size (SZ): A ship's size determines its IO cost and the amount of 'design points' available for its other characteristics. A large ship also takes less relative damage from weapon hits than a small ship.

Technological Level (Tech): A player's tech determines the tech level of any ships being built. At tech 4 a player may spend IOs to increase a friendly planet's ENVT. If a ship has a higher tech than the ship opposing it, all the ship's characterisitcs (aside from size and speed) are increased by one for each level of tech difference. However, any characteristic that was zero will not be increased.

Transports (TRAN): Transports are heavily armored but fragile ships whose purpose is to carry one colonist or one army. Transports have a speed of two plus the current tech level and are assigned to task forces.

Traders: Traders are fragile ships whose purpose is to carry food and ore between worlds. Each trader can carry one ore point or food point each turn. Traders are not assigned to task force but are in a player trader pool and are provided wherever needed.

Defense Base: Defense bases are constructions on a planet which defend a planet from space attack. Defense bases are either SDFs or PDFs.

System Defenses (SDF): An SDF is a defensive base built on a planet which has a Missile Rating of 32. It is capable of supporting friendly task forces which are defending that planet as well as firing into space at ships trying to bomb or invade its planet.

Planetary Defenses (PDF): A PDF is a defensive base built on a planet which can only fire at ships in the planet's atmosphere, but can only be attacked under the same conditions. PDFs have an Energy Weapons rating of 32. Both PDFs and SDFs provide ground support for defending armies.

Armies: Armies are used to oppose invading armies and to fight guerillas. When there are only invading armies on a planet, the planet is captured. When there are no invading armies on a planet, the planet is recaptured.

Guerillas: After a planet has been captured, guerillas automatically appear. In each production phase in which guerillas are still operating, they receive replacements. During each combat phase, guerillas fight the invading armies. In each trade phase, guerillas destroy some industry. Once all the guerillas have been destroyed, the planet belongs to the invader as if it were his home world.

3.0 THE GAME SETUP

Before a game of Imperium Galactum begins, it is necessary to determine the conditions under which the game is to be played. The Starting Menu on the Scenario Disk shows the possible parameters. The highlighted items show what conditions go into effect when the space bar is pressed to start the game.

The first option is NEW GAME/SAVED GAME. If you are continuing a game you saved earlier, press the '1' key. Note that all the other options turn off. This occurs because a saved game automatically operates under the conditions existing when it was saved.

The next four options control the status of the four players. By pressing the appropriate keys (2-5), you determine whether a player is to be run by a human or the computer or is not to be in the game at all.

The next option is only useful if there is at least one computer player. The solitaire level determines the skill of the computer opponents (actually how many advantages are given to the computer). Playing at level 1 gives the computer an enormous edge. Playing level 4 leave the computer at a disadvantage. To change levels, press the '6' key, and the highlighter cycles around the four levels.

Option 7 determines whether or not there is a chance for independent worlds. If YES is chosen, there are occasional worlds which are already partially or fully developed, but are not run by a player. Trade agreements may be made with independent worlds, allowing the use of their production (but not their population or armies).

Option 8 determines whether you want to use the map provided with the rules, or a map randomly generated by the computer. If YES is chosen, the stars are randomly placed and the players' home systems randomly selected (but always at a K, G, or F type star). If NO is chosen, the map is the one described in the rules, and the home systems are fixed as well. In both cases, the planets still are randomly determined, so that each game is different.

After the space bar has been pressed, the computer loads the star data. If you chose a random setup, it displays a possible map and asks if it is acceptable. If you think the map is interesting, type 'Y'; if not, type 'N'; and the computer will display another map.

Next, you are asked, 'Minimum starting industry (0-60)?'. Type in the minimum number of industry you want your home world to have. (It is suggested you use 50). Each human player has a minimum industry based on this number. Each computer player has a minimum industry based on the solitaire level.

Finally, you are asked to name each player in the game. If the setup is not random, the computer asks in player order. If the setup is random, the computer asks in a random order. This allows human players to determine randomly which player each will be. There is a slight edge for player one, so determine beforehand who is to type in his or her name first . . . if the first player to be named is four, then the first person is player four.

4.0 USING THE MAP

During the course of the game, the map is displayed a number of times. The specific decisions required each time are explained in the sections on the phases of the game. The following are general guidelines to follow in all cases.

4.1 READING THE MAP

The strategic map displays all the star systems in the game. The tactical map displays an area one quarter the size of the strategic map and is useful for making out what player task forces are around what systems. Any star system containing a task force of the viewing player shows the player's task force symbol at the appropriate corner of the star.

A task force which is currently moving, that is, has a number of movement phases before it arrives at its destination (ETA) other than zero, will not be displayed because it is not in the system. The task forces of other players will be displayed if the enemy task force is in a system which contains one of the viewing player's task forces or a planet owned by the viewing player.

4.2 MOVING THE CURSOR

To look at a star system, give orders to planets in a star system, or give orders to task forces in a star system, the cursor must be positioned over the star system. The cursor starts the Control Adjustment and Movement Phases over the player's home system. The cursor starts the Production Phase wherever the player left it at the end of the Control Adjustment Phase. To move the cursor, type the key for the direction desired:

Whenever the cursor is over a star system the menu at the bottom of the map displays the name of the star system and its type.

4.3 THE PLANET DISPLAY

If a 'P' is pressed during the Control Adjustment or Production Phase, or an 'S' during the Movement Phase, and you have visited the system (occupied the system with a task force at the end of any Combat Phase), you can see any planets in the system.

If there are no planets in the system, the screen prints 'NO PLANETS'. If there are planets, they are displayed as follows:

```
PLANET #1

ENVT: 53
RSRC: 59

IO POOL: 508

PLANET #2    OWNER: INDEPENDENT WORLD
             ALLIED TO: THE HIVE MIND

NEGOTIATE: YES FRIENDLY
POP CNTRL: 32   ENVT: 76    AG: 8   POP: 32
MIN CNTRL: 14   RSRC: 42   MINE: 14  WPP: 32

                IND: 14    ACTV: 14
GUERILLAS: 0    ARMY: 14    SDF: 4   PDF: 4
```

If the world is undeveloped or is owned by another player without a friendly task force occupying the system, it will merely show the planet's ENVT and RSRC as, for example, in

PLANET #1 above. (Please note that the words "world" and "planet" are used interchangeably. However, the game generally prefers to speak of "independent worlds" and "friendly planets" or "enemy planets". If the planet is owned by the viewing player, is an independent world, or is an enemy occupied planet with a friendly task force occupying the same system, the computer displays complete information (as in PLANET #2 above).

If the planet is an independent world and is allied to a player, the allied player will be displayed directly below the owning player. If the planet is a conquered world with guerilla resistance, the original owner is directly below the current owner.

If the planet is an independent world, the negotiation status of the viewing player is displayed (that is whether the player is currently negotiating with the planet). Next to the negotiation status is the diplomatic stance of the planet toward the viewing player. The diplomatic stance determines the likelihood of the planet accepting a trade agreement with the viewing player, or, if currently allied with the viewing player the chance of breaking the agreement (throwing the player off the planet).

During the Control Adjustment Phase and the Production Phase there is an entry, the Working Population Points (WPP). This is the amount of POP needed to run all the AG, the MINES as determined by Mine Control (MIN CNTRL), and the IND on the planet. Also, during the Control Adjustment Phase and the Production Phase, the IO Pool is displayed. This is NOT the Mil Pool for that planet, but is the player's total IO Pool.

5.0 THE GAME PHASES

Imperium Galactum is played in game turns. Each game turn consists of commerce followed by two moves. (Please note that the sequence of player-computer interaction in a turn is outlined in SECTION 12.0 SEQUENCE OF PLAY IN A TURN.)

A. The Trade Phase
B. The Control Adjustment Phase
C. The Production Phase
D. The Negotiation Phase
E. The Post Negotiation Combat Phase
F. The First Movement Phase
G. The First Combat Phase
H. The Second Movement Phase
I. The Second Combat Phase

6.0 THE TRADE PHASE

During the trade phase, the computer acts to create food, ore and IOs and trades them. At this time, task forces on commerce raid or embargo missions attempt to destroy traders coming or going from the star they're patrolling. After all IOs have been produced, mines and ships depreciate, and ships on repair are restored to 100% EFF and set to the owning player's tech level. Finally, population increases and guerillas attack factories.

6.1 TRADING

The computer handles all trading. First the computer creates food points. Each AG makes four food points and requires one half a population point to use. Any AG in excess of the available work force is destroyed before it has created any food. This is done for each of the player's planets and allied planets. The computer then finds any friendly planets which have population in excess of the available food and any planets which have food in excess of the population requirements. Food is moved via trader between the two planets, one food point per trader. Traders do not move to or from any star system occupied by an enemy task force (that is a task force on a garrison, patrol, repair, or move mission). Traders moving to or from a system where an enemy task force is on commerce raid or embargo missions may be destroyed. Friendly task forces on patrol missions in systems where traders have been lost may intercept the enemy missions. Trader captains may refuse to go to any system where other traders have been lost. (Trader decisions, based on the current situation and random factors, are, of course, calculated and executed by the computer.)

After all food has been traded, any planet with population in excess of the new food supply loses the excess population.

Now the computer creates ore in each mine for which there are sufficient workers. Each mine produces one ore point and requires one half of a population point which has not already worked to create food. Surplus ore is shipped to factories in need of ore, in the same manner as food was. Only traders which have not been used yet may transport ore.

Finally, the computer creates IOs from factories that have a sufficient work force available. Each industry producese three IOs and two Mil IOs and requires one and one half population points (not used in mining ore or creating food) to operate.

6.2 EXAMPLE OF PLANET ECONOMICS

Let us take as an example a player who has three planets: his home world (#1), and two colonies (#2, #3):

#1: ENVT:96 RSRC:88 AG:46 MIN:63 IND:70 POP:184
#2: ENVT:55 RSRC:60 AG:05 MIN:31 IND:24 POP:54
#3: ENVT:85 RSRC:11 AG:20 MIN:06 IND:06 POP:19

The player has 40 traders.

The first thing the computer does is create food. On #1, there is a 46 AG, so 23 POP (46AG × ½POP/AG) are required to create the food. Planet #1 has 184 POP, easily enough for the job. The AG creates 184 food points (46AG × 4/AG) which is just enough to feed the population of 184 POP. There is no surplus food, and the population does not require any additional food. On planet #2, there is 5 AG, so 2½ POP (5AG × ½ POP/AG) are required for the job. Since there is enough population to perform the job, 20 food points (5AG × 4/AG) are produced. This feeds only 20 of the population, so the remaining 34 POP still need food. On planet #3, there is a 20 AG requiring 10 POP (20AG × ½POP/AG) which the planet has. The 20 AG creates 80 food points (20AG × 4/AG) which leaves a food surplus of 61 food points (19 POP requiring only 19 of the 80 food points). Since planet #2 needs 34 food points, traders attempt to transport the food, one point at a time, between planet #2 and planet #3. This requires 34 traders. If a trader were to be intercepted by commerce raiders at either of the systems containing planets #2 and #3, no food points would be lost; but another trader would be sent until all needed food was moved or the traders refused to attempt the mission. Now all planets have sufficient food for their populations, so none starve. The remaining excess food on planet #3 is lost.

The computer now works the player's mines. Planet #1 has 63 mines requiring 31½ POP. There is 161 POP available to work (184 − 23 used for AG), so the 63 mines produce 63 ore points. Since seventy Industry require 70 ore points, seven are still needed for the IND. On planet #2 thirty-one mines require 15½ workers. There are 51½ POP points available (54 POP − 2½required for AG). So the mines produce the 31 ore points. By a not so strange coincidence, they have 7 extra ore, which is what is needed on the home world. (The player knows what he is doing). Planet #3 has 6 mines requiring 3 POP. With 9 POP left available the planet produces 6 ore points which is exactly what it needs for its industry. The computer now attempts to move 7 ore from planet #2 to planet #1 but only has 6 available (40 traders − 34 to move food = 6). Therefore the computer would, if not intercepted, move 6 ore points to planet #1 (maybe the player isn't so smart after all).

Finally, the computer builds IOs. At planet #1, the player has 70 IND, 69 ore points and 129½ POP. The ore can only supply 69 IND, so using 103½ workers, planet #1 will have an Active Industry of 69. The lost industry is not destroyed, but simply waits until the next turn when there may be more ore. On planet #2, there were 24 IND, 25 ore points and 36 available workers. The extra ore is lost, and the 24 IND has the 36 POP it requires. Therefore planet #2 has 24 Active IND. Planet #3 has 6 ore points, 6 IND and 6 available workers. Though it has enough ore for its industry the six workers may only operate 4 IND, since each IND requires 1½ POP. So planet #3 has 4 Active IND.

At the end of the Trade Phase, planet #1 has a MIL Pool of 138 (69 × 2), planet #2 a MIL Pool of 48 (24 × 2), and planet #3 a MIL Pool of 8 (4 ×2). The player's IO Pool has 69 × 3 + 24 × 3 + 4 × 3 = 291 more IOs than at the start of the Trade Phase.

6.3 DEPRECIATION

After the computer finishes trading, it goes through each planet and depreciates the mines on the world. Depreciation is done by getting a random number between 1 and the resources (RSRC) of the planet. If the random number is less than the number of mines on the planet, a mine is destroyed. This process is repeated until the depreciation roll fails. Thus the higher the RSRC of a planet, the more mines it takes to cause a high depreciation.

Ships also depreciate. Ships not on a repair mission automatically lose four from their efficiency (EFF) in each Trade Phase.

6.4 OTHER TRADE PHASE OPERATIONS

At the end of the Trade Phase, all ships on repair missions are restored to 100% EFF and set to the owning player's current tech.

Guerillas destroy a certain number of IND and mines based on the number of guerillas.

Population for each planet increases by 25% but does not exceed the population control (POP CNTRL) setting. (See 7.0 THE CONTROL ADJUSTMENT PHASE.)

7.0 THE CONTROL ADJUSTMENT PHASE

During this phase, you have the ability to adjust the population and the mining controls on friendly planets and the negotiation status on independent worlds. You also can break off trade agreements with allied independent worlds.

7.1 THE MAP MENU

At the start of the phase, the strategic map is displayed with the cursor over your home system. At the bottom of the map, you will find the star system's name and type and the question 'LOOK AT THE (P)LANETS IN THIS SYSTEM, TYPE 1-8 TO MOVE THE CURSOR, (T)ACTICAL MAP OR (Q)UIT?'. To look at the planets in the system or adjust their controls, type 'P'. To move the cursor, type the numbers one through eight as explained in Section 4 USING THE MAP. To use the tactical map, type 'T'. When you have completed the Control Adjustment Phase, type 'Q'; and you will move on to the Production Phase.

7.2 ADJUSTING PLANET CONTROLS

The Population Control you assign sets the maximum population of the planet. The population needs to be fed or it starves, and it increases 25% a turn. The population does not automatically fall off to the population control; it simply does not exceed that level. Its purpose is to insure that surplus food is possible. To adjust the population control, type 'P'. When you are asked what value you want the control set to, respond with a number within the given limits and press <CR>.

The Mining Control figure you assign assures that mines which have been lost through depreciation in each turn will be replaced. At the end of the Control Adjustment Phase, the computer automatically buys mines on each planet where the number of mines is less than the mining control. Of course this only is possible if you have sufficient IOs to pay for all the rebuilt mines. Mining Controls are adjusted in the same manner as Population Controls, except that an 'M' is typed.

Negotiation Status Control determines whether or not you are negotiating with an independent world. To make a trade agreement with an independent world (ally to it), type 'N'; and the status will be set to YES. If you do not wish an agreement with the planet, type 'N' again; and the status will be set to NO. You might choose to do this just prior to invading an independent world since you may not attack an independent world with which you are allied.

For the same reason you may want to break a trade agreement with an allied independent. To do so, type 'B'. This will not only break the current trade agreement, but will set the negotiation status to NO.

To adjust a planet's controls, move the cursor over any system you have explored and press 'P'. If you have visited the system (See Section 4.3), the planet display will now be on the screen. Below the planet display is the question 'ADJUST CONTROLS FOR WHICH PLANET (1,2,OR E(X)IT)?'. Press the number of the planet for which you wish to adjust the controls or an 'X' if you do not wish to (or are unable to) give orders to any of the planets. The bottom of the screen will now show the question 'ADJUST (P)OP CNTROL, (M)INING CONTROL, (N)EGOTIATION STATUS, (B)REAK AGREEMENT OR E(X)IT?'. Only if the planet is an independent world allied with you will the break agreement option be given. Only if the world is independent will the Negotiation Status option be offered. Players may not adjust the Population or Mining Controls of independent worlds.

8.0 THE PRODUCTION PHASE

During the production phase, you may construct ships, defense bases and armies, develop planets, and spend IOs on research. At the start of the phase, the map is displayed. The cursor is situated where it was at the conclusion of the Control Adjustment Phase. At the bottom of the map, you are asked to 'LOOK AT (P)LANETS OR (W)ARSHIPS, (B)UILD, TYPE 1-8 TO MOVE THE CURSOR, (T)ACTICAL MAP OR (Q)UIT?'. To build on a friendly or allied independent world, move the cursor over the system (using the keys 1-8) and type 'B'. To see the task forces currently in the system, type 'W'. When you have finished the Production Phase type 'Q'; and you will proceed to the next player's Control Adjustment Phase.

8.1 THE SHIP DISPLAY

If you press 'W', the screen clears and prints the ship display. The name of the player owning the ships is at the top. Below the name is a list of the ship classes and the number and average effectiveness of all the player's ships of each class. Below the ship classes, the number of transports in the system is displayed. Finally, all the task forces in the system are. Task forces are numbered from one to thirty-two.

At the bottom of the ship display, the computer now asks 'LOOK AT (T)ASK FORCE, (R)ETURN TO THE MAP, LOOK AT (P)LANETS OR (W)ARSHIPS, (B)UILD OR (Q)UIT PRODUCTION?'. This offers the additional option of seeing the individual task force.

8.2 THE TASK FORCE DISPLAY

If you have pressed 'T' to look at an individual task force, the computer asks 'WHICH TASK FORCE (1-32)?'. Respond with the number of the task force you wish to see. The screen will show the Task Force Display for that task force.

The number of the task force being examined is at the top. Below this, the computer prints the task force's current position (if moving, this is the star from which the task force left), the task force's destination, the number of movement phases before it arrives at the destination (ETA), and the mission the task force is currently performing. In a column on the right are the number of transports in the task force, the number of armies, and the population being carried. Finally, the display shows each ship in the task force. Each ship has an ID, type (or class), efficiency, and tech level. If there are more ships in the task force than are displayed on the screen (i.e. the screen is full), type 'M'; and more of the task force's ships will be shown. If for any reason you wish to destroy any ships in the task force, type an 'S'; and you may scuttle the ship by typing in its ID number and a <CR>. When you finish looking at the task force, type 'X'; and the main menu will return.

8.3 PRODUCTION

If you type 'B' (Build) from the main menu, you will be asked 'WHAT PLANET NUMBER (1,2, OR X)?'. Respond as you did during the Control Adjustment Phase with the number of the planet or an 'X' to exit. If you own that planet or are allied to it, you may build on it.

When you build on a planet, the screen shows the Active Industry on the planet, your IO Pool, the planet's Mil IO Pool, and the minimum recommended traders. The minimum recommended traders is calculated by the computer for all your planets. Next, each of your ship classes is shown: the class name (type), the class characteristics and the total number of that ship class that you own. Below this are two columns. The first column contains items which require Mil IOs to purchase, and the second column consists of items requiring only IOs to purchase. The transports and traders show the total number of each that you own. Tech shows your current technological level. All other items show the amount of the item on the planet.

The cursor appears over the number of ships of your first class. To purchase any of these ships, type the total number you want to own followed by a <CR>. If you don't wish to purchase any new ships, type <CR>; and the cursor will move to the next class. If you type a number, the number must be at least as large as the current value. Once something has been ordered to be constructed it is constructed, so make sure you want it before you buy it. To buy any item requiring Mil IOs, you must have both the number of IOs and the number of Mil IOs required for purchase of that item. In addition, the planet's Active Industry must equal or exceed the Minimum Active Industry requirement for the item. Thus, for example, to buy three medium ships, the planet must have 24 Active Industry, and must be able to spend 36 IOs and 36 Mil IOs.

As you continue to type in numbers (or <CR> if you don't want or can't afford an item), the cursor moves from item to item. If the value of an item is already at its maximum, then the cursor skips over the item. Armies may not be built on captured worlds still containing guerillas.

8.3.1 IO Cost Table

ITEM	IO COST	MIL IO COST	MINIMUM ACTV IND	MAX VALUE
Small Ship	5	5	10	Total number of
Medium Ship	12	12	24	warships may not
Large Ship	35	35	70	exceed 255
Transport	5	5	10	255 per task force
Trader	2	2	4	No limit
SDF	3	3	6	30
PDF	3	3	6	30
Army	1	1	2	255
Tech Level	350	0	0	7
Industry	8	0	0	100
Mine	5	0	0	RSRC
Agriculture	2	0	0	ENVT-50
Environment	10	0	0	100, can't be built until Tech = 4

8.3.2 Designing Ships

There are two other options available when the

cursor is over warships. Besides a number or a <CR>, you may type 'R' for revise or 'S' for scuttle. When a class is scuttled, every ship in the class is destroyed; and the class may be redesigned to any size. When a class is revised, all ships of the class which are not on a repair mission are destroyed. All ships of the class being repaired assume the characteristics of the revised class. A revised class is always the size of its predecessor.

When you type 'R' or 'S', the computer asks for confirmation. After confirmation, ships are destroyed as determined above. If 'S' is pressed, you are asked 'WHAT IS THE SIZE OF THE NEW CLASS (L,M,S)?'. Type 'L' for a large ship, 'M' for a medium ship, or 'S' for a small ship.

You are asked to name the new class. The class name must contain at least one and may not have more than four characters.

To the right of the number of ships of the class, the number of design points that may be spent on the ship class appear. Each characteristic costs the number of design points shown on the following table.

SHIP DESIGN TABLE

	SMALL SHIP	MEDIUM SHIP	LARGE SHIP
DESIGN PTS	16	32	64
PB	1	1	1
EN	1	1	1
MS	1	1	1
EV	1	2	4
AR	1	1	1
AM	1	1	1
SPD	1	2	4
MINIMUM EV (NOT COST)	4	2	1

Designing a class is similar to buying a ship. The cursor appears over the previous value of the characteristic. To alter the value of the characteristic, type the value you wish. To use the previous value, simply hit <CR>. As you finish with each characteristic, the number of design points remaining is updated; and the cursor will move to the next characteristic. If it does not, you have typed in a value that is either below the minimum or requires more design points than you can spend. When the speed is typed in, the cursor returns to the number of ships in the class; and you can continue buying items.

9.0 THE NEGOTIATION PHASE

During this phase, you have the opportunity to change your diplomatic stance toward other players, to negotiate with computer players and, at the end of the phase, to learn of any agreements formed or broken with independent worlds.

9.1 DIPLOMATIC STANCES

The diplomatic stance a player has toward another player determines what actions the opposing players' ships take during the Combat Phase. There are three stances: Friendly, Neutral, and Hostile.

If a player is hostile to another player and each has a task force in the same system (not on commerce raid, embargo, or withdraw missions), combat occurs. If a player has a task force on commerce raid or embargo missions in a system, he or she must be hostile to another player to destroy that player's traders. If a player has a task force in a system containing another player's planet, he or she must be hostile to attack that player's planet.

A player who is neutral does not cause combat to occur and does not commerce raid or attack planets. However, the player fights a hostile opponent at no penalty.

If two players are friendly to each other and they have task forces in the same system as another player with whom they are both hostile, they fight together in combat against a common foe. In the case of invading a world, the player who was listed first when the computer announced the combat (the controlling player) is considered the owner of any world captured.

EXAMPLE: Player #1 and Player #3 are attacking a planet. Both contribute to capturing the planet, but because Player #3 was listed first, Player #3 will become the owner of the planet.

NOTE: If two human players have made an agreement in which the non-controlling player has agreed to get a planet, simply have the controlling player withdraw before invading with armies.

If the task forces of two players, one of whom is hostile and one of whom is friendly, are in a system, combat occurs BUT ON THE FIRST ROUND OF COMBAT, THE FRIENDLY PLAYER MAY NOT SHOOT BACK!

Players always are considered to be hostile to independent worlds with whom they are not allied and neutral to any independent worlds with whom they are allied. Since being neutral does not allow an attack on a planet, a player may not attack an allied independent world.

9.2 THE DIPLOMATIC STANCE TABLE

All operations of the Negotiation Phase are conducted from the Diplomatic Stance Table. This table shows your stance toward each other player and the stance each other player had toward you in the LAST TURN.

At the bottom of the table, the menu asks 'CHANGE STANCE TOWARD PLAYER (2,3,4), (N)EGOTIATE WITH A COMPUTER OPPONENT, OR E(X)IT?'. To change your stance toward a player, simply type the player number. Your stance toward the player cycles from friendly to neutral to hostile and back to friendly each time you type the player's number. To negotiate with a computer opponent, type 'N'. When you are finished with the negotiation, phase type 'X'.

If you type 'N' for negotiate, the computer asks you with whom you wish to negotiate and displays all players run by the computer. Choose one of these players by typing the player number. You will then be asked if you want the player '(F)RIENDLY OR (N)EUTRAL TO YOU, OR HOSTILE TO AN OPPONENT . . .'. If you wish the player to be friendly to you, type 'F'. If you want the player neutral to you, type 'N'. If you want the player to be hostile toward another player, type the number of the other player. At this point, the computer either accepts or refuses your offer.

9.3 NEGOTIATION WITH INDEPENDENT WORLDS

After you have exited the Negotiation Phase by typing 'X', the computer informs you of any changes in trade agreements. Trade agreements allow you to use the production of the independent world. Before any agreements are made or broken, an independent world may change its stance toward you. There is a 10% chance of the world becoming more friendly and a 10% chance of it becoming more hostile. If the world is hostile, there is a chance it will become permanently hostile.

Hostile independent worlds have a 25% chance of making an agreement with you and a 50% chance of breaking an agreement with you. Neutral independents have a 50% chance of making an agreement with you and a 25% of breaking off. Friendly independents have a 90% chance of joining you and a 10% chance of throwing you out. You may make an agreement only with an independent world which is not currently allied to another player and with which you are negotiating (NEGOTIATE = YES).

10.0 THE MOVEMENT PHASES

In this phase, the players can move ships between task forces in the same system, load and unload transports on friendly planets, and order task forces onto missions.

10.1 THE MISSIONS

There are six missions that can be assigned to task forces. The first three (Garrison, Repair, and Patrol) do not cause the task force to move. The second three (Commerce Raid, Embargo, and Move) allow the task force to be moved to another system.

The garrison mission causes the task force to sit at a star system and defend it against enemy task forces entering the system. Task forces on garrison do not attempt to find enemy commerce raid missions.

The repair mission may be ordered only in the First Movement Phase, and only to task forces in a system with (1) a friendly world which has industry or (2) an allied independent world which has industry. In the Production Phase, the ships of friendly task forces on repair missions return to 100% EFF and assume the TECH which the player had at the start of the phase. They are not destroyed if the player revises the ship's class. Task Forces on repair do not return fire during combat.

The patrol mission is identical to the garrison mission, except that task forces on patrol attempt to find and engage enemy task forces on commerce raid or embargo missions.

The commerce raid mission sends a task force to search for enemy traders coming or going from the system where it is stationed. If it encounters a patrol, it fights one round and withdraws. Commerce raiders are not considered to be in a system, so they are not involved in any combat within the system. Nor are they considered to have entered the system for the purpose of determining whether or not a player may look at the system's planets.

The embargo mission is identical to the commerce raid mission, except that it is more agressive. Task forces on embargo have a higher chance of finding traders and being found by

patrols. Additionally, they are not required to withdraw from combat after the first round.

The movement mission sends its task force from its current star system and moves it toward the system given for its destination.

10.2 THE MAP MENU

When you first enter the Movement Phase, the strategic map is displayed with the cursor over your home system. At the bottom of the map, the computer asks, 'TYPE 1-8 TO MOVE THE CURSOR,(C)HANGE THE MAP,(O)RDER FLEET, LOOK AT YOUR (F)LEET, THE (S)YSTEM OR (Q)UIT?'.

Typing '1' through '8' moves the cursor as it does in other map displays, and typing 'S' returns the Planet Display. Typing 'F' provides the Ship Display, but you can choose whether you wish to look at the task forces in the system or all of your task forces. When you have completed all your movement, type 'Q' to quit the phase.

Typing a 'C' allows you to change the map. The computer then asks, 'CHANGE TO THE (T)ACTICAL MAP, THE MISSION DISPLAYED TO (G,R,P,C,E,M,A) OR E(X)IT?'. To use the tactical map, type 'T'. If you are on the tactical map, type 'S' to return to the strategic map. Normally, the maps show all of your task forces which are not in transit. If you type 'G', 'R', 'P', 'C', 'E', or 'M', each map shows only those of your task forces which are on garrison, repair, patrol, commerce raid, embargo, or move missions. Typing 'A' restores the map showing all of your task forces. Typing 'X' returns you to the map menu.

10.3 ORDERING YOUR TASK FORCES

By typing 'O' from the map menu, you can order those of your task forces that are in the system under the cursor. Ordering includes the ability to split task forces and transfer the ships of one task force to another, as well as loading and unloading transports and assigning missions to task forces. When you type 'O', the computer asks, 'WHICH TASK FORCE (1-32)?'. Respond with the number of a task force within the system. The computer then will ask, '(L)OAD OR (U)NLOAD TRANSPORTS, (J)OIN OR (S)PLIT THE TASK FORCE, SET MISSION (G,R,P,C,E,M) OR (E(X)IT?'.

10.3.1 Loading Transports

The option to load or unload transports is offered only if the task force being ordered has transports. Each transport may carry one army or one colonist (POP pt.). To load transports, type (L). You are asked the number of the planet from which you wish to load. Typing 'X' returns you to the previous menu. Only planets actually belonging to the player may be entered.

Next, the computer asks for the number of armies you wish to take off the planet and gives you a range from which to respond. Enter the number and <CR>. If there is any space left on the transports, the computer asks for the number of colonists (POP) you wish to take off the planet and gives you a range from which to respond. Enter the number and <CR>. At this point, the transports are loaded as you wish them to be.

10.3.2 Unloading Transports

Unloading transports occurs in the same manner as loading them. The planet must be a player owned planet, or in the case of colonists, an unclaimed planet. The computer only offers to unload armies or colonists if you have some aboard your transports. Unloading colonists onto an unclaimed world asserts your claim on the world; and in the next production phase, you may buy AG, Mines, etc. Remember, however, that the unloaded colonists must be fed!

10.3.3 Splitting Task Forces

To split a task force into two or more task forces, type 'S'. The Task Force Display appears on the screen. At the bottom of the display, the computer prints, 'NEW TASK FORCE = # #'. This is the task force being formed from the one to which you are giving orders. The new task force will be identical to the originating task force, except that it will be empty. Below the new task force declaration, the computer asks, 'TRANSFER (T)RANSPORTS, WARSHIPS BY (E)FFICIENCY OR (I)D, OR E(X)IT?'.

To transfer transports to the new task force, type 'T'. You are asked for the number of transports you wish to transfer. Respond with a number between zero and the maximum transports owned. Transports carrying armies are transferred first, then those carrying colonists, and finally empty transports.

There are two ways to transfer warships to the new task force. If you type 'I', the computer asks for the ID of the ship to be transferred. You may respond either with a single ship or a range of ships. To transfer a single ship, type the ID number of the ship and <CR>. To transfer a group of ships, type an ID number and a comma, followed by another ID number and a <CR>. All ships in the task force between the first ID number and the second ID number (inclusive) then are transferred to the new task force.

The other way to transfer warships is to type 'E'. The computer asks, 'TRANSFER SHIPS AT EFFICIENCY BELOW (1-100)?'. Respond with a number between 1 and 100 and <CR>. All warships in the task force with an EFF below the number entered will be transferred to the new force. This is a good way to break off crippled ships.

After transferring ships by ID or EFF, you may transfer more to the same group by again typing 'E', 'I' or 'T'. When you have finished transferring all that you wish to, type an 'X'. The Task Force Display appears again, this time showing the task force with its new composition.

10.3.4 Joining Task Forces

To join two task forces, type 'J'. The computer prints the Task Force Display and asks, 'TRANSFER TO WHICH TASK FORCE?'. Respond with the number of a task force which is in the same system and which is not on a repair mission. From this point, follow the procedure used for splitting a task force. All ships transferred are transferred to the chosen task force. No more than 255 transports may be placed in one task force. If all the ships in a task force are transferred, the task force is eliminated.

10.3.5 Setting Missions

To set the mission of a task force, type the corresponding letter:

Garrison	'G'	Commerce Raid	'C'
Repair	'R'	Embargo	'E'
Patrol	'P'	Move	'M'

If you order the task force to a commerce raid, embargo or move, the map appears; and at the bottom, the computer asks, 'WHAT IS THE DESTINATION (TYPE THE NAME OR 1-8 TO MOVE THE CURSOR AND <RETURN> WHEN FINISHED)?'. If you know the name of the destination system, type in the letters of the system without a <CR>. As you are typing the letters of the system name, the computer compares the letters with system names. As soon as it has enough letters to determine the destination, the computer prints the star system's name. The other way to indicate the destination system is to move the cursor. If you type a number, the computer moves the cursor as it normally does. When the cursor is over the destination system, type <CR>.

Once the destination system has been indicated, the computer prints the destination and the number of movement phases it will take the task force to reach the destination (ETA). At the end of each movement phase, the ETA is reduced by one. When the ETA reaches zero, the task force has arrived at its destination. All destinations must be a star system within two turns' travel of the task force. A task force travels with the speed of its slowest ship. Transports move with a speed of two plus the player's tech level.

If the target is within range of the task force, the computer asks for confirmation. By typing 'Y', you send the task force off to its target. Task forces which previously have been ordered in the same Movement Phase may be recalled and given new orders by attempting to order them again.

11.0 THE COMBAT PHASES

In this phase, the computer looks for opposing forces in the same system. After resolving all ship engagements, the computer looks to see if any task forces are eligible to attack planets. After all planetary combats are resolved, the computer resolves all guerilla-army combats.

11.1 SHIP TO SHIP COMBAT

If opposing forces are in the same system, ship to ship combat occurs. The computer announces that there is a fleet engagement at the site of the battle and lists the attackers and defenders.

11.1.1 Choosing the Combatants

NOTE: This subsection is for your information only and will not affect your decisions.

The defender is chosen on the basis of which player was in the system first and which players have planets in the system. After the attacker and defender are chosen, the computer draws in all allies of the defender which are in the system. If any of these allies are not hostile to the attacker and the attacker is not hostile to them, the attacker withdraws rather than fighting. After the defender's allies have been brought in, all of the attacker's allies in the system which are hostile to all of the defenders are brought in.

11.1.2 Retreat Options

Each player in turn is given the option of examining his or her task forces, the enemy fleet, and targetable planets. While examining the task force, the player may also join and split the task force. If the combat is in its second

round (i.e. the ships have shot at each other once during this engagement), the player has the option of withdrawing all, some or none of the task forces from combat.

To examine a friendly task force, simply type 'F'. The computer asks which task force and prints the Task Force Display, just as it does during other phases. With The Task Force Display shown, the player may join and split task forces normally, with the added restriction that ships may be transferred only to other task forces involved in the combat.

To look at the enemy fleet, type 'E'. The computer shows the number of ships of each class the computer player has, and an approximation of the average weapons rating of the enemy fleet.

To see any planets owned by the defending players, if any, type 'L'. Independent worlds are not shown as no player owns these worlds.

To withdraw all your task forces from the engagement, type 'A'. If there are no enemy left in the system, then your task forces will remain in the system. To withdraw a task force from combat, type 'I'. The computer asks which task force to withdraw. Type the number of the desired task force and <CR>. This action is extremely useful when combined with splitting and joining if you wish to remove damaged ships from the fight during an engagement.

11.1.3 Combat Options

In this section, the rules refer to a tactical disadvantage. This tactical disadvantage is a 25% decrease in the affected player's firepower. After looking over your forces, the computer provides you with options based on the situation. The Combat Options are always chosen by the controlling player in an alliance (that is the player who was listed first when the computer announced the combat. If you are fighting an enemy fleet, you will either be fighting near a planet or far away from a planet. If the engagement is near a planet, the defenders will receive the benefit of the planet's SDFs. Each SDF has a 16 MS (Missile System Rating) when supporting a defending fleet. If the engagement is far from the planet, the defending ships are on their own.

If there are no targetable planets, the engagement will automatically be far from a planet (you can't use the defenses of a planet not your own). If there are one or two targetable planets, the attacking player may choose to attack a planet (the player designates the target) or may engage the enemy. Choosing to attack a planet is declaring a hit and run raid. The player recklessly drives on the planet, fires all long range weapons and leaves the system. The defender may choose to defend a planet (the player designates which) or engage the enemy.

If the attacker and defender both choose to engage, the combat occurs in deep space, far from any planet. Any time the battle is in deep space, each player has the option of targeting any enemy transports. If the option is chosen, the player's task forces fights at a tactical disadvantage, but shoots at enemy transports as well as enemy warships.

If the attacker chooses to attack a planet and the defender either engaged the enemy or defended the targeted planet, a round of combat is between the attackers and defenders, with the attackers having a tactical disadvantage. At the end of the combat round, any surviving attackers will bomb the planet destroying industry, mines, agriculture, armies and population. The amount destroyed is based on the strength of the attackers. Energy weapons are not effective in bombing a planet, missiles are partially effective, and planetary bombardments are fully effective. After bombing the planet, the attacking task forces must withdraw. This means the only way to capture a planet when the enemy is present is to engage the enemy and destroy them or force them to withdraw.

If the attacker chooses to attack a planet and the defender is protecting a different planet, the attacker fights the planet's SDFs and any survivors bomb the planet. After the attacker bombs a planet, the attacking task forces immediately withdraw.

11.2 SHIP TO PLANET COMBAT

Any time a ship to ship engagement is fought and the defender withdraws, the attacker has the option of attacking the defender's planets in the system. In either the First Combat Phase or the Second Combat Phase, after all ship to ship combat is over, players in a system containing enemy planets or non-allied independent worlds have the option of attacking those planets. A player has the option to attack only if the attack strength of the fleet is at least sixteen. This is provided so a player will not know whether an enemy scout is sitting over an independent world.

11.2.1 Retreat Options

The abilities to retreat, rearrange task forces, etc. are the same during ship to planet combat as with ship to ship combat, with the following execeptions:

A player is never required to attack a planet: he or she may break off action before the first round of combat.

There is no enemy fleet to look at, so there is no option to look at the enemy.

11.2.2 Combat Options

The combat option is chosen by the controlling player in an alliance (that is, the player who was listed first when the computer announced the combat). The options available are based on whether or not there are defense bases on the target planet.

If there are defense bases (SDFs and PDFs) the computer asks, '(A)RMY ATTACK, (F)LEET AND ARMY ATTACK, ATTACK THE PLANET'S (D)EFENSES, (B)OMB EXTRA (NON-MILITARY) TARGETS OR (G)ARRISON?'.

To eliminate the defense bases, type 'D'. The computer asks if you wish to attack from space or atmosphere. If the fight tasks place in space, the PDFs are not involved in the combat. Further, the attacker's PB and MS weapons, as well as the defending SDFs, are at reduced strength, while the attacker's EN weapons are not useful at all. If the fight takes place in the planet's atmosphere, all weapons and bases contribute to combat.

To bomb other targets, such as industry, as you are attacking the planet's defenses, type 'B'. This places your ships at a tactical disadvantage.

If you decide you don't want to attack the world after all, type 'G', the fight ends, just as if you had typed 'A' during the retreat options.

To capture a world, it is usually best to eliminate the enemy defense bases first. However, if you wish to capture the world with the defense bases intact so that you may use them, type 'F'. Your fleet enters the atmosphere, ignoring the enemy defense bases. The defending defense bases gratefully blow as many attacking ships out of the skies as they can. Surviving transports unload any armies they are carrying and surviving warships stop screening your transports long enough to attack opposing armies. The defending bases also do their best to destroy the attacking armies.

If you type 'F', the computer in the next combat round thoughtfully allows you to abandon your armies with the '(A)RMY ATTACK' option. If you type 'F', your fleet again goes into the atmosphere to support your armies. If, as is more probable, you find that your fleet is heavily battered and you do not wish to risk them again, you may type 'A'. Your armies then fight the enemy armies while the enemy defense bases again support the valiant defenders.

At the end of a combat round, if there are no enemy armies left on the planet, the planet is considered captured; the battle is over. On the other hand, if there are no attacking armies left, the assault has been successfully fought off; and the attacker is left to figure out what to do next.

If there are no defense bases at the start of a combat round, the computer asks, '(B)OMB, (P)URGE, (C)APTURE THE PLANET, OR (G)ARRISON?'. Since the planet is unable to defend itself, all these actions are without risk to your ships. If you don't wish to attack the planet, type 'G'.

To cut back on the planet's armies before attempting to capture it, type 'B'. Unfortunately, this also destroys some of the industry, mines, and population that you are attempting to capture.

To capture the planet, type 'C'. Your fleets and armies attack the planet, just as if you had typed 'F' when there were defense bases. In this case, however, there are no defense bases; and your fleet and armies keep attacking until there are no friendly armies or there are no enemy armies left on the planet.

Finally, if you do not want anyone to have the planet, type 'P'. Purging a planet eliminates all traces of life on the planet without disturbing the environment. In fact, the world becomes just the same as any other unclaimed, undeveloped world.

11.3 GUERILLA COMBAT

After a planet is captured, a number of guerillas equal to the planet's AG appear on the planet. These guerillas destroy industry and mines during the Trade Phase, and fight your armies at the end of the First and Second Combat Phases. Further, until the last guerilla is destroyed you are unable to build armies on the world. It is not truly yours.

Fighting guerillas is somewhat difficult and fleet support does not help. Each guerilla attacks an army with a 12% chance of destroying it. At the same time, each army attacks a guerilla with a 25% chance of destroying it and a 12% chance of destroying a POP point.

If at the end of a Combat Phase there are no guerillas left on the planet, the planet is

considered the attacking player's just as much as if he or she were the original owner. If at the end of any combat phase there are no armies on the planet, but there are guerillas; the planet is considered recaptured and belongs to the original player. If at the end of the Trade Phase, there are still guerillas on the planet; the guerilla force will recruit back to the planet's AG.

12.0 SEQUENCE OF PLAY IN A TURN

I. Computer Action
   Computer carries out each player's trade in the Trade Phase.
II. Player Action
   Each player in turn moves through the following:
   Control Adjustment Phase
      Map Display
      Decision/Action
   Production Phase
      Map Display
      Decision/Action
III. Human Player Action
   Negotiation Phase
      Diplomatic Stance Table Display
      Decision/Action
IV. Computer and Human Player Action
   Computer carries out negotiations for independent worlds
   Results Displayed
      Post Negotiation Combat Phase
   Computer determines where combat conditions exist and players execute combat
   Results Displayed
   Opportunity to Save Game
V. Human Player Action
   Each player in turn moves through the following:
   First Movement Phase
      Map Display
      Decision/Action
VI. Computer and Human Player Action
   First Combat Phase
      Results Displayed
      Opportunity to Save Game
VII. Repeat of V. and VI. for Second Movement and Second Combat Phases

13.0 ASSORTED RULES

13.1 Any planet which has no POP on it immediately loses any agriculture, armies and guerillas. The owner loses ownership and the first player to land any colonists claims the planet along with its mines and industry.

13.2 Task forces which have been in transit for one movement phase may not be given any orders until they arrive at their destination.

13.3 At the end of each combat phase, you have the chance to save the game. When the computer asks if you wish to save the game, type 'Y'. The save game program loads. Follow the instructions on the screen to save the game. You can return to the game after saving it.

13.4 A ship with a movement of one or more adds its tech level to its speed. A ship with a speed of zero is always speed zero.

14.0 VICTORY CONDITION

Imperium Galactum lasts through as many turns as you wish. When all players agree to end the game, enter the save game program (by typing 'Y' at the conclusion of the combat phase) and type 'E'. The computer asks for a confirmation. Type 'Y' (Yes) to confirm. The computer calculates the total population for each player. Independent worlds and worlds with guerillas provide no victory points to any player. Otherwise, each point of POP is worth one victory point.

After the victory point totals and the winner have been displayed, the computer sets all players to human and allow you to return to the game. This will allow you to look at the opposing players' fleets and planets.

15.0 PLAYER NOTES

The following principles and techniques were found to be successful during play testing. If you wish to learn these from your own experience, you may cease reading and start the game.

The optimum number of mines on a planet is approximately the resource level minus five.

We found it best to provide escort vessels to screen your large ships. This is especially true when attacking planets, where PDFs can seriously damage (if not destroy) your toughest ships.

As your tech level increases, occasionally withdraw all ships of one class to your home world and place them on repair. This allows you to revise the class and trade the speed you have gained through tech for more armaments and defenses.

As warships get below an EFF of 88, send them home for repair. Low EFF ships are easier to damage and do not do as much damage as intact ships.

Never let a heavily damaged ship fight. Instead of throwing it away while it can't fight well, withdraw it from the combat and let it repair and fight another day. Remember, repairing a ship does not cost IOs, while building one does. This holds true especially for large ships.

When attacking a planet, attack in the atmosphere. Do not attack a planet until you have a ratio of at least 3:2 of warships of various sizes to defense bases.

Don't invade a world unless you have at least a 5:2 ratio of armies to the planet's AG level. This ratio is adjusted upward or downward slightly for the number of armies the opposing player has. If you are invading while they still have defense bases, count each defense base as an additional AG point.

The best way to colonize a planet is to send one colonist down to the world to claim it. During the following production phase, buy all the AG, mines and industry that your waiting colonists can work. Then land the remaining colonists in the following movement phase. Remember to make sure you have surplus food and a trader to keep that first colonist alive. On the turn BEFORE you load your transports, set the population control N — 1 points higher than it currently is, where N = the number of colonists you plan to load. Next production phase the population increases to that level (Population increase comes AFTER starvation). In the Control Adjustment Phase of the turn you load the transports reset your population control to its former level minus one. This insures that there is one surplus food. In the following movement phase load your transports and be off. In this way you lose only one POP from your work force. When you buy for the newly colonized planet, insure that there is enough AG for the population and enough left over for the population to grow. When the colony has enough AG to feed its POP, restore the POP CNTRL of the original world to its starting level.

CREDITS

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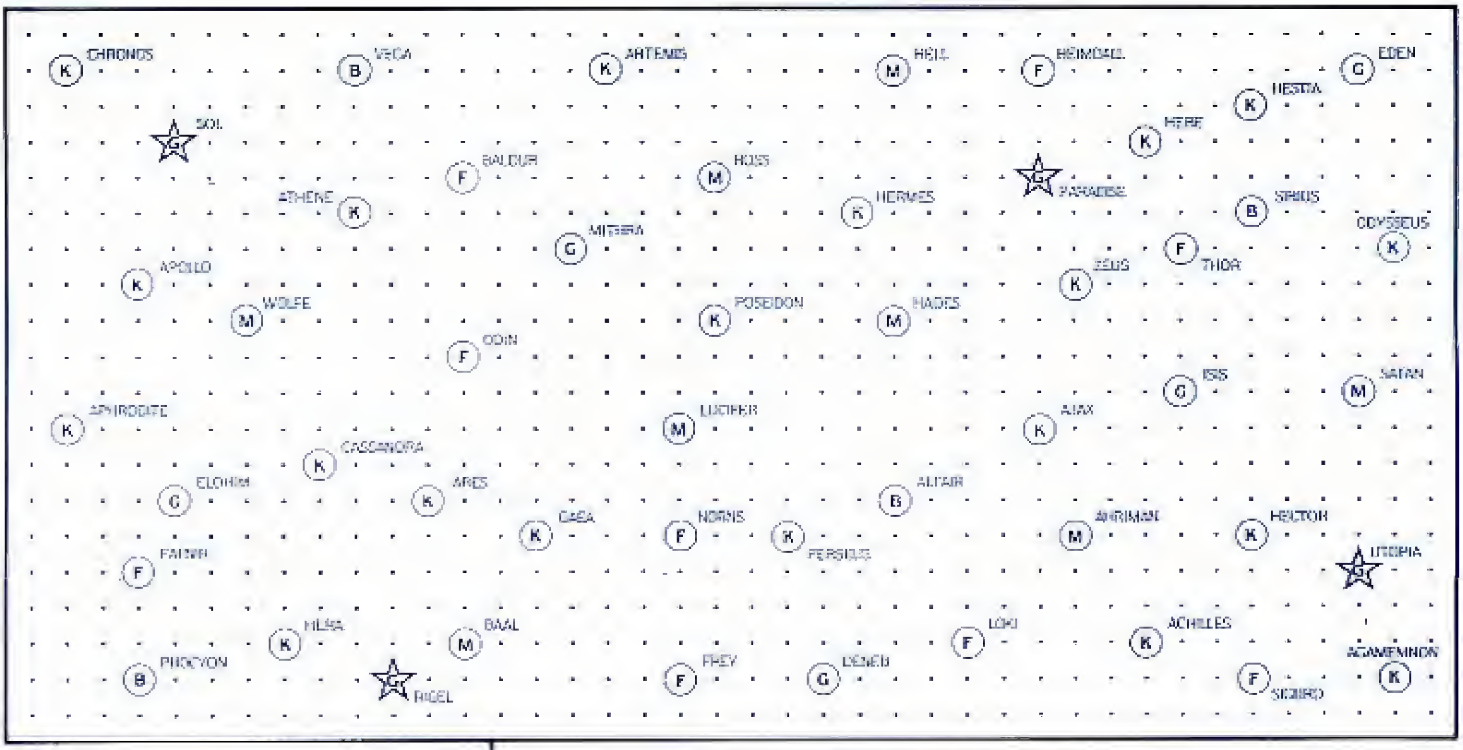
APPLE version: Produced using copyrighted software products of Einstein Corporation.

ATARI version: Produced using copyrighted software products of Monarch Data Systems.

C-64 version: Parts of this product are copyrighted by Drive Technology Ltd. 1983.



= capital system

PLAYER SYMBOLS

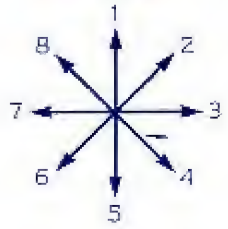
PLAYER #1 Task Force

PLAYER #2 Task Force

PLAYER #3 Task Force

PLAYER #4 Task Force

CURSOR MOVEMENT CONTROLS



ECONOMIC NOTES

- ☐ Each AG makes 4 FOOD and needs ½ POP
- ☐ Each MINE makes 1 ORE and needs ½ POP
- ☐ Each IND makes 3 IOs and 2 Mil IOs and needs 1 ORE and 1½ POP

STRATEGIC SIMULATIONS INC

IO COST TABLE

ITEM	IO COST	MIL IO COST	MINIMUM ACTIVE IND	MAX VALUE
Small Ship	5	5	10	Total number of warships may not exceed 255
Medium Ship	12	12	24	
Large Ship	35	35	70	
Transport	5	5	10	255 per task force
Trader	2	2	4	No limit
SDF	3	3	6	30
PDF	3	3	6	30
Army	1	1	2	255
Tech Level	350	0	0	7
Industry	8	0	0	100
Mine	5	0	0	RSRC
Agriculture	2	0	0	ENVT-50
Environment	10	0	0	100; can't be built until Tech = 4

SHIP DESIGN TABLE

	SMALL SHIP	MEDIUM SHIP	LARGE SHIP
DESIGN PTS.	16	32	64
PB	1	1	1
EN	1	1	1
MS	1	1	1
EV*	1	2	4
AR	1	1	1
AM	1	1	1
SPD	1	2	4

* Minimum EV (which is free) is 4, 2, and 1 EV for small, medium, and large ships, respectively.

MISSION ASSIGNMENT

MISSION	CODE
GARRISON	G
REPAIR*	R
PATROL	P
COMMERCE RAID	C
EMBARGO	E
MOVE	M
WITHDRAW	W

* May only be given during first movement in system with friendly or allied independent industrial world